



# JOINT IED DEFEAT ORGANIZATION NEWS STORY



ATTACK THE NETWORK — DEFEAT THE DEVICE — TRAIN THE FORCE

## JIEDDO Holds First Homemade Explosives Focus Conference

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**WASHINGTON, D.C.** — The Defense Department lead charged with finding ways to minimize the impact of roadside bombs brought together members of government, academia and the fertilizer industry.

The Joint Improvised Explosive Device Defeat Organization, known as JIEDDO, hosted their first Homemade Explosives Focus Conference Nov. 15-17.

The goal of the conference was finding new ways to defeat a longtime problem — the improvised explosive device (IED) by specifically addressing the illicit use of fertilizer products as precursors for homemade explosives, also known as HME.

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The conference was comprised of 56 attendees: 13 academics, 16 subject-matter experts from U.S. government agencies, 20 domestic and international fertilizer industry representatives and seven international government representatives. The conference began with presentations from senior JIEDDO leadership detailing the IED and HME global threats.

“IEDs are increasingly comprised of fertilizer-based homemade explosives as their primary explosive component,” JIEDDO director Lt. Gen. Michael D. Barbero said during his opening remarks.

Barbero noted that more than 80 percent of the IEDs in Afghanistan — which cause 90 percent of the casualties there — have HME as the main charge. The majority of HME is easily derived from calcium ammonium nitrate — or CAN — fertilizer. Even though Afghanistan has a countrywide ban on its importation, CAN continues to be smuggled in and used for detrimental purposes.

“Explosives can be made from a range of fertilizers, but it is far too easy to turn calcium ammonium nitrate into a bomb and it is the bomb-maker’s product of choice — by far,” said Barbero.

Conference attendee Dr. Johannes Reuvers, chairman of Fertilizer Europe, informed the group that less than 1 percent of 18-to-20 million tons of CAN fertilizer manufactured per year is diverted for misuse in IEDs. Instead, the more common use of CAN fertilizer is by Afghan farmers to grow food and other crops. CAN use has altruistic purposes — growing crops and in mining — and an inhumane purpose — changing it into an explosive to kill or injure people.

The primary objective of the conference was to address potential solutions to the misuse of fertilizer products as an explosive charge. During his presentation, Mitchell Howell, JIEDDO’s deputy director of Rapid Acquisition and Technology, challenged participants to create fertilizer formulations that reduce blast effectiveness, are difficult to use as or turn into a homemade explosive, limit availability of precursors, and increase cost to the threat networks, and not to the agricultural producer.

“We want bomb making for insurgents to be an inherently dangerous business,” Howell said to the audience inside the Hilton Crystal City Hotel’s conference room.

Howell said JIEDDO was looking for solutions that could immediately begin testing and implementing.

“To meet this problem, you have to understand the components. This conference is the first step, a critical step,” he said.

IEDs are not just threats in Afghanistan and Iraq. Since 2009, the number of worldwide IED events has doubled. Outside of Iraq and Afghanistan, Colombia has seen the greatest number of IED events, followed by Pakistan, India, the United States and Russia.

“We’re losing life, limb and eyesight every day,” Howell said.



On the first and second days of the conference, the attendees broke into their four working groups and discussed solutions. Each group included a blend of subject-matter experts ranging from agronomists and chemists to fertilizer manufacturers and international government representatives. On the final day, the

four groups presented more than 15 recommendations that could be implemented as short-term, mid-term and long-term solutions.

Following these presentations, more than 30 interagency representatives from the departments of Homeland Security, State, Defense, Commerce and Agriculture convened to discuss the policy and interagency implications of the recommendations.

Howell said JIEDDO will review the recommendations of the working groups and issue a broad agency announcement to solicit proposals from industry and academia. In addition, Howell said an HME task force will be formed and led by Brig. Gen. Scott Miller, JIEDDO deputy director.

Through the three-day conference, JIEDDO leadership learned that the conference format worked well and was beneficial to shaping research and development ideas. As a result, there are likely to be more events of this type to leverage experts from industry, academia and government to address the IED threat, Howell said.